

IN THE SPECIFICATION:

Please amend paragraphs [0002] and [0003] of the specification as follows:

[0002] A photodetection device (referred to hereinafter as “back-illuminated type photodetection device”), with which light that has been made incident on a back surface and has been transmitted through a semiconductor substrate is detected by a charge reading part (referred to hereinafter as [[“”]]CCD reading part[[””]] “charge-coupled device (CCD) reading part”), comprising a charge-coupled device disposed on a front surface of the semiconductor substrate, has good sensitivity down to shorter wavelengths in comparison to a photodetection device (referred to hereinafter as “front-illuminated type photodetection device”), with which incident light is detected directly by a CCD reading part disposed on a front surface. A back-illuminated type photodetector is thus suited as a photodetector for a spectroscopic analysis device that is required to enable measurements of a wide wavelength range. With a photodetector in this field of spectroscopic analysis, high resolution imaging characteristics and high S/N signal-to-noise ratio (S/N) characteristics are strongly demanded.

[0003] In order to achieve high S/N characteristics in the above-described back surface incidence type photodetection device, the CCD reading part must be cooled actively using a Peltier element, etc. A back-illuminated type photodetection device equipped with such a cooling structure is described, for example, in Japanese Patent Application Laid-Open No. 4-290464. As shown in Fig. 1, a conventional back-illuminated type photodetection device is equipped with a semiconductor substrate 101, on one surface of which is formed a CCD reading part 102, a package 103, holding this semiconductor substrate 101, and a cover 104, closing off package 103

at the side of semiconductor substrate 101 on which the CCD reading part is formed. A heat conducting member 108, which exhibits plasticity at least at room temperature, is sealed between CCD reading part 102 and cover 104, and a cooling member 103 107 is disposed at the exterior of package 107 103 in a manner such that a cooling surface of cooling member 107 contacts cover 104.